Feline Upper Airway Infections

Sneezing? Coughing? Your Kitty May Need More Than Chicken Soup!
Cats, especially kittens, often get upper airway infections. If your cat shows any signs of respiratory illness, such as sneezing, wheezing, "gummy" eyes, or a runny nose (see box), make an appointment to have him or her evaluated right away. Depending on their cause, upper airway infections can quickly become serious, especially in kittens. In adult cats, untreated infections can lead to other ("secondary") infections or damage delicate sinuses, resulting in chronic problems.

Most feline upper airway infections are caused by viruses, but some cats develop secondary bacterial infections. Signs of upper respiratory disease can also be linked to other serious problems, like allergies, dental disease, cancer, or the presence of a foreign object in the nose or the back of the mouth.

What Are the Signs?

Signs of upper airway tract disease in cats vary depending on what is causing them.

The most common ones are:

- Sneezing
- Watery or mucous discharge from the eyes or nose
- ▶ Cough
- **Fever**
- Lethargy
- Loss of appetite or weight

Less common signs include:

- ▶ Hoarse "voice"
- ▶ Change in face shape
- Ulcers in the mouth or eyes



If your cat shows any signs of respiratory illness make an appointment to have him or her evaluated right away.

What Causes Feline Upper Airway Infections?

Approximately 90% of all upper airway infections in cats are caused by two common viruses: feline herpesvirus-1 and feline calicivirus. Feline herpesvirus is related to the virus that causes cold sores and chickenpox in people; however, people cannot get sick from the feline virus. Upper airway infections in cats can also be caused by fungi or bacteria. It is common for cats to be "coinfected"—infected with more than one agent (e.g., a virus and a bacteria) at the same time—which can make treatment and recovery longer and more difficult.

How Are These Diseases Spread?

Feline upper airway infections are spread the same way as the common cold: a healthy cat comes in contact with an object that has been used by an infected cat—for example, a shared food bowl or toy. Frequently disinfecting shared items can help cut down on transmission risk. Feline calicivirus can also be spread when a healthy cat uses the same litterbox as an infected cat. And, just like the common cold, your





Feline Upper Airway Infections

hands can play a role in spreading these viruses, so if you have or touch a sick cat, wash your hands before touching another cat!

Even after they are no longer sick, many cats that have been infected with feline herpesvirus and calicivirus can transmit these viruses to other cats. Therefore, seek professional veterinary advice before introducing a new cat with an unknown vaccination history into your house or before placing your cat in an unfamiliar setting with other cats, such as a boarding facility.

How Can I Keep My Cat Healthy?

Cats that are kept indoors are at a lower risk of contracting upper airway diseases. Cats that are allowed outside; have recently been in a shelter, boarding facility, or cattery; or live in a multicat household are at higher risk of contracting these diseases. Kittens, because of their immature immune systems, are also at higher risk.

Vaccines are available to help prevent or reduce the severity of the most common infections. Many vaccines may not be 100% effective in preventing a disease, but they do help limit how sick your cat becomes if it is infected. See the box about the current guidelines regarding which vaccinations cats should get and how often.

What Do I Do If My Cat Is Already Sick?

Diagnosing the exact cause of an upper airway infection can be difficult because many cats are coinfected. When you bring your cat in to the veterinary office, it helps if you can remember what vaccinations your cat

Raising The Red Flag

Signs of upper airway disease can be caused by underlying conditions, such as nasal tumors or dental disease. If your cat's illness lasts an unusually long time or is accompanied by unusual pain, facial deformity, significant weight loss, or some other odd sign, additional diagnostic tests may be needed to rule out other problems.

has had, when your cat might have been exposed to an infected cat, and when your cat began to show signs of being sick. Some laboratory tests may be necessary to help with the diagnosis.

Many sick cats lose their appetite because nasal congestion affects their sense of smell, so these cats may need to be tempted with baby food or another delicious treat.

As in people, very few drugs can control viral infections, so treatment typically consists mostly of keeping your cat warm, comfortable, and eating and drinking properly. Many sick cats lose their appetite because nasal congestion affects their sense of smell, so these cats may need to be tempted with baby food or another delicious treat. Discharge from the nose and eyes should be gently cleared away if the cat will allow it, and any lesions in the mouth or eyes should be treated. You may be given a prescription for a broad-spectrum antibiotic to help combat any secondary bacterial infections. Dehydration can be a problem in seriously ill cats, so fluid therapy may be called for in some cases. C

Vaccination Guidelines

The American Association of Feline Practitioners (AAFP; **catvets.com**) considers feline herpesvirus-1 and feline calicivirus vaccines as "core," meaning that they should be given to virtually every cat. They are usually given in a single combination vaccine. The current AAFP recommendations include vaccinating kittens as young as 6 weeks, accompanied by a series of booster shots. The number of boosters depends on the kitten's age when the first shot is given. Currently, yearly vaccination is recommended for cats in high-risk environments. Cats in low-risk environments should receive boosters every 3 years.



Feline Senior Wellness

How Old Is Old?

With many cats routinely living well into their teens or even their twenties, many owners and veterinarians wonder, *When is a cat truly a senior citizen?* The answer is that there is no specific age at which a cat becomes "senior." Individual pets age at different rates. As a general guide, however, the American Association of Feline Practitioners (AAFP) has suggested the following age ranges to help you assess how the aging process may be affecting your cat's health:

Mature to middle-aged: 7 to 10 years

Senior: 11 to 14 years
Geriatric: 15+ years

Knowing the general age range of your cat can help you monitor your pet for early signs of any problems. For example, as cats grow older, their bodies become less able to cope with physical or environmental stress. Their immune systems become weaker, and they are more prone to developing certain diseases, such as diabetes mellitus, hyperthyroidism, kidney disease, inflammatory bowel disease, or cancer. That's why a senior wellness visit with your veterinarian can

be so important for the longterm health of your cat.

It's Time to See the Doctor

Just as with people, it's important for feline patients to see their doctors more frequently as they age. During a senior wellness exam, your veterinarian will screen your pet for a variety of age-related health concerns. A thorough senior wellness exam is designed to:



Healthy senior cats should set the veterinarian every 6 months.

Clinical Conditions in Older Cats

- Cognitive disorders Deafness Retinal disease/ vision problems Kidney disease Dental disease Thyroid disease Constipation Lung disease ▶ High blood pressure Cancer Arthritis ▶ Diabetes mellitus ▶ Inflammatory bowel disease
- Promote the longest and healthiest life possible
- Recognize and control known health risks for older cats
- Detect any signs of disease at their earliest stage, when they are the most treatable

Most experts agree that healthy senior cats should see their veterinarians every 6 months. Cats age much more rapidly than people do, and health problems can occur quickly. It's also important to realize that cats are very good at hiding signs of illness. They may appear healthy for a long time only to become suddenly ill once their ability to compensate for an underlying disease is gone.

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Feline Senior Wellness

What You Need to Know About Your Senior Cat

You can help your veterinarian by keeping a close eye on your cat between exams. Unexplained weight loss or weight gain is often one of the first indicators of underlying disease. Weight management itself can also be an issue: many mature cats are obese, while senior or geriatric cats often have trouble maintaining their weight and can become too thin. Obesity itself can contribute to the development of diabetes, osteoarthritis, and other conditions.

Behavior problems also become more common as pets age. One study^a found that 28% of 11- to 14-year-old cats developed at least one behavior problem. This percentage jumps to 50% in cats older than 15 years. If you note any changes in your cat's behavior (e.g., unusual cries) or regular routines, such as grooming or litterbox habits, bring your cat in for a checkup and inform your veterinarian.

The Senior Cat Wellness Visit

At every visit, your veterinarian will ask you a list of questions designed to obtain a complete medical history for your cat and determine if there have been any changes in health status or behavior since the last visit. During the physical examination, your veterinarian will assess your cat's overall appearance and body condition by listening to his or her heart; feeling for signs of pain, tumors,

One study found that 28% of 11- to 14-year-old cats developed at least one behavior problem.

or other unusual changes in the neck and abdomen; checking joints for signs of arthritis or muscle weakness; and examining the ears, eyes, and mouth for any signs of disease.

Finally, a routine senior wellness exam should also include a panel of laboratory tests to check your cat's blood for signs of disease and to assess your cat's kidney and liver function. Most veterinarians recommend that this baseline laboratory testing be conducted at least once a year in cats that are 7 to 10 years old and then more frequently as the cat ages. Additional tests may be required depending on the results of these routine screening exams.

Don't Forget the Basics!

Along with paying more attention to your cat's health as he or she ages, you should continue routine wellness care such as parasite prevention, prophylactic dental care, nutritional management, and appropriate vaccination. Maintaining proper routine care becomes even more important as your pet's immune system ages. Also, take steps to ensure your cat's comfort, such as making sure litterboxes and food bowls are still easily accessible to your old friend and that you give him or her plenty of attention and affection. C

How Aging Affects Your Cat

- Reduced skin elasticity
- Reduced stress tolerance
- Changes in sleep/ wake cycles
- Hearing loss
- Vision loss

- Decreased sense of smell
- ▶ Brittle nails
- Lessened lung capacity
- Reduced ability to digest fat
- ^aMoffat KS, Landsberg GM. An investigation of the prevalence of clinical signs of cognitive dysfunction syndrome (CDS) in cats. *JAAHA* 2003;39:512.

Tests That Senior Cats Need

Which tests are necessary and how often are different for each cat, but, in general, the following tests will provide your veterinarian with a good "snapshot" of your senior cat's health. Over time, these test results can be tracked and compared to help your veterinarian detect any developing health trends.

- ▶ CBC (complete blood count)
- ▶ CHEM screen (liver and kidney function)
- ▶ Urinalysis
- ► T₄ (thyroid function)
- ▶ Blood pressure





Feeding Your Pet: How Much Is Too Much?

As every loving pet owner knows, it's hard to resist a furry face begging for a special treat. We look into those big brown eyes, hear that hopeful purr, and feel that the best way to reward all that devotion is by giving our favorite dog or cat something tasty to eat.

In reality, though, this is often the worst way to repay our pet's affection. When treats make up too much of a pet's diet (≥10%), the nutritional balance of an otherwise healthy diet can be upset. Too many treats can also lead to obesity, which increases the risk for other serious health problems, including osteoarthritis, diabetes (in cats), heart and respiratory diseases, and many types of cancers. Overweight pets are also at increased risk for complications during anesthesia if they need to undergo surgery or other procedures. And if a pet already has a health condition, obesity makes the problem that much harder to manage. Despite these concerns, however, pet obesity has become something of an epidemic in the United States. Studies indicate that nearly 50% of adult dogs and cats in the United States are overweight or obese, and this percentage increases among older pets.a

Finally, apart from contributing to potentially dangerous health conditions, obesity can affect your pet's overall comfort and quality of life. Being overweight can lower your pet's energy level and hamper his or her ability to enjoy an active lifestyle with you and your family.

^aAssociation for Pet Obesity Prevention. 2008 National Pet Obesity Awareness Day Study. Accessed September 2009 at **petobesity prevention.com**.

What Causes Obesity?

Simply put, obesity results when an animal eats more calories than it burns off during normal activities or exercise. Factors that can contribute to obesity include:

- Overfeeding or overeating
- Inactivity or low activity levels
- Breed
- Age
- **Sex**
- ▶ Reproductive status (intact versus spayed/neutered)
- Preexisting diseases (e.g., hypothyroidism, diabetes mellitus, Cushing's disease)

This is why it is vitally important to follow your veterinarian's advice on what particular diet to choose *and* how much and how often to feed your pet. Pay close attention to the labels of the pet foods that you buy. For example, an adult pet shouldn't be fed a diet formulated for puppy or kitten

Weight problems also frequently result from inactivity r diet to ow often

Managing the Battle of the Bulge

- Feed a well-balanced, veterinarian-approved diet. If necessary, feed a calorie-restricted diet.
- ▶ When you treat your pet, give healthy treats.
- Make sure your pet gets plenty of regular age- and health-appropriate exercise.
- ▶ Don't allow your pet to have unrestricted access to food—its own or another pet's!
- Make sure all family members are on the same page when it comes to feeding—and treating—your pet.



Feeding Your Pet

growth periods. If your pet has a weight problem, there are many good-quality adult maintenance and weight control diets to choose from, and your veterinarian can advise you on which best meets your pet's needs.

Weight problems also frequently result from inactivity, so it is essential to give your pet plenty of opportunities for regular exercise that is appropriate for his or her age and health status. A vigorous daily walk—provided your veterinarian approves—is an excellent place to start for many canine companions. And while most cats typically won't tolerate leash walking, regular play periods with fun toys, such as a laser pointer or tossed ball, can provide satisfactory activity levels and help maintain their health.

It is also important to realize that certain breeds, especially smaller ones, are more prone to being overweight or obese, as are many senior pets. In extreme old age, however, the situation is often reversed, and weight loss can be the problem.

How Do I Know If My Pet Is Obese?

No matter whether your pet is a dog or a cat, and regardless of what size or breed it is, you should be able to feel its ribs. Many owners mistakenly think that the ability to feel ribs means their pet is too thin. In reality, being able to feel some ribs is a sign that your pet is at a healthy weight. Additionally, when you look down at your pet's back, you should be able to see a distinct "waist" where the body narrows, just behind the rib cage and in front of the hindquarters. When viewed from the

A Caution for Cats

Never begin a weight loss program for your cat without first consulting your veterinarian. Cats are prone to a disease called *feline hepatic lipidosis* (fatty liver), in which the liver accumulates a large amount of fat and cannot function properly. It is a serious disease that can be fatal. Greatly restricting a cat's diet or changing the diet to one that an obese cat will not eat can lead to the development of this disease.

Did you know that a single dog biscuit can contribute as much as an extra 100 calories per day to a dog's diet?

side, your pet's abdomen should appear to be slightly tucked up behind the rib cage. If your pet has fat deposits over its back and at the base of its tail, or if it lacks a waist or an abdominal tuck, chances are that it has a weight problem.

Veterinarians typically use a measurement called a *body condition scale*, or *body condition score*, to assess whether a pet is underweight, overweight, or just right (healthy). Your veterinarian can use this scale to show you the proper way to assess your pet's weight.

Overcoming Obesity

Despite the fact that obesity is generally due to a very simple problem—too much food!—it can be frustratingly difficult to solve. You need to enlist your veterinarian's help.

First, your veterinarian will give your pet a thorough physical examination and ask you for a complete nutritional history. The more specific your answers are, the better your veterinarian will understand how to approach your pet's weight problem.

To track how much your pet eats, it may be helpful for your family to keep a "food diary." Everyone in the family should write down how much he or she feeds the pet, every time the pet is fed. Treats count! You may be surprised to learn that the daily "treat or two" you think your pet is getting is really four, five, or six. Also be sure to keep track of any tidbits you give during training sessions or when encouraging a pet to take medication, such as hiding a pill in a piece of cheese.

Weight loss is difficult, and it can take a long time, but following your veterinarian's recommendations regarding special diets, portion control, treat modification, and any prescribed exercise programs will help make your pet's weight loss program a healthy success. Be sure to keep any recommended follow-up appointments so that your veterinarian can track your pet's progress and adjust any recommendations. C



Ear Cleaning 101

Home ear cleanings can enhance treatment of an existing ear problem or prevent the development of a new one. Some dogs that are prone to ear infections may need regular cleanings between veterinary visits. Home ear cleanings can also help remove dirt and wax that can prevent needed medications from reaching inflamed areas, as well as get rid of allergens and microbes that may be contributing to the inflammation or infection.

There are several techniques for home ear cleaning. This handout describes the simplest one. Ear cleaning can be relatively easy to do at home, as long as a few simple guidelines are followed. The most important guideline is to always put health and safety first: *If, for any reason, your pet becomes so agitated that you feel you are at risk of being bitten, stop.* If the procedure seems excessively painful for your pet, stop and get professional advice.

Create a Wiggle-Free Zone

Although some pets are willing to sit or lie quietly while you clean their ears, the reality is that most object, at least at first. Choose your work space carefully! Ear cleaning can be messy, so it's best to pick a room that's easy to clean (e.g., bathroom, laundry room, shower stall) or to even go outside.

Here are some tips on how to keep your pet wiggle free while you work:

- Place your pet on a stable work surface that you can stand next to and allow him or her to lie down, either in an upright "sphinx" position or flat on his or her side. Wrap one arm—the one you will use to treat the ear—over your pet's shoulders, and use your upper arm and elbow to help keep him or her still. You can wrap your other arm under your pet's neck to hold the ear open and ear flap back.
- If you don't have a suitable high work

surface, you can use the same method while seated on the floor, either holding the front of your pet's body partially against your body or on your lap. If you have a large dog, you can have it sit back against your



Use one hand to hold the ear flap back so that you can treat the ear with the other.

legs while you stand behind it. Sometimes it helps to back the pet into a corner.

- Small dogs and cats can be wrapped in a large towel—rolled up like a burrito—and held against your body, leaving only the head free. Be sure not to wrap your small pet too tightly.
- If your pet struggles, talk to him or her calmly. Take a break if he or she becomes extremely agitated. Massaging the base of the ears (unless they are painful) should feel good to the pet and may help calm him or her enough that you can resume treatment.

What You'll Need

- ▶ Old clothes
- Safe, easily cleanable work area (tile or linoleum floors, water-resistant walls)
- Towel
- Nonirritating ear wash or rinse recommended by your veterinarian
- Cotton balls or tissues
- Cotton swabs (to be used on outer ear only)
- Be sure to reward good behavior!
- If this method fails, get a helper to hold the pet while you treat the ear.

Cleaning Steps

There is no one perfect way to perform an ear cleaning, but the general steps are as follows.



Ear Cleaning 101

1. Squeeze

With your pet properly restrained, hold the ear solution bottle just over the opening of the affected ear and gently squeeze the prescribed amount of solution into the ear. Do not squeeze the solution bottle too hard, as a powerful stream can irritate tender and inflamed ear structures.

Tip: Store the cleaning solution at room temperature to avoid causing unnecessary discomfort to the pet. (Do not store ear medications that require refrigeration at room temperature; however, allowing them to reach room temperature before use makes them more comfortable.)

2. Massage

After administering the solution, fold the ear flap down against your pet's head and try to prevent your pet from shaking his or her head too much. Gently massage the very base of the ear to distribute the solution as far as possible into the deep horizontal ear canal. To massage the base of the ear, follow the cartilage tube of

To see a video of where to massage the ear, visit

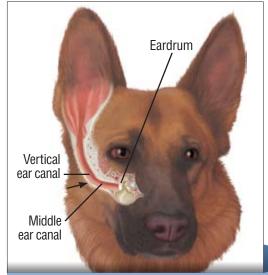
CompendiumVet.com.

the ear canal with your finger down along the pet's neck until you feel the tube bend and turn inward. Then gently compress the tube with your finger. (Unless the ear is extremely painful, most animals like this part!) Keep the solution in the

ear for the prescribed amount of time. When you are done, allow your pet to shake its head to remove some of the solution.

Signs of Ear Trouble

- Odor
- Scratching/rubbing at ears or side of head
- ▶ Discharge
- Debris
- ▶ Shaking/tilting of the head
- ▶ Pain
- Head shyness (not wanting the head or ears to be touched)
- ▶ Irritability



Anatomy of the ear. One look at the inside of a dog's ear shows why dogs are often prone to ear problems. Debris, allergens, bacteria, and moisture are all easily trapped in the long, deep ear canal, especially the middle ear, which is almost horizontal. The arrow points to the place to massage the base of the ear. (With permission from Pfizer Atlas of Infection in Dogs and Cats. Wilmington, DE: The Gloyd Group, Inc; 2008.)

Tip: Prepare for the head shake! Wear old clothes and keep a towel handy. You may want to drape the towel over your pet's head or neck before administering the solution.

3. Wipe and Swab

When most of the solution has been shaken out, use cotton balls or tissues to gently wipe away any discharge, loosened debris, and remaining liquid from the ear flap, side of the neck, and hair below the ear as well as the opening of the ear canal. Cotton swabs can be used to clean small skin pockets in the visible ear.

Tip: Do not push cotton swabs into the ear canal, even for a short distance. A sudden shake of the head or slip of the hand could result in a cotton swab puncturing the delicate eardrum or pushing debris back inside the inner ear canal.

Follow Recommendations, Please!

The ear is a very delicate structure. It is very important to closely follow recommendations regarding ear cleanings. Treating too frequently or too aggressively can make the problem worse, not better. Sensitive, already inflamed parts of the ear can be damaged. Because many ear washes contain chemicals and drying agents, it is also important to use only products recommended by a veterinarian. C

With thanks to Dr. Craig E. Griffin, Animal Dermatology Clinic, San Diego, for his contributions to and review of this material.



Halloween Hints for Pets:

Halloween Hints — No Fright, No Fear For Pets This Year!

Halloween is one of the most fun times of the year, and it's natural to want to try to involve your family pet in all the activity. It's important to keep in mind, though, that not all Halloween activities are fun or safe for pets. A few simple precautions can keep your spooky celebrations fun for everyone in the family, whether they are two footed or four footed.

People Treats Are Not Pet Treats

Did you know that chocolate can be poisonous to pets? It contains a substance—theobromine—that dogs find difficult to metabolize. Even modest amounts, such as a snack size bar or two, can be poisonous to a small dog. Other types of Halloween goodies, such as gum, chewy candies, hard balls, etc., can be choking hazards or cause GI upset. And it's not just the treats that you have to worry about. Pets that find dropped candy on the floor will often eat it—wrapper and all! Since foil and plastic are not digest-

ible, these substances can become lodged in your pet's digestive tract. Be sure to keep treats out of reach. And be sure to supervise any little human goblins that might be running around the house to make sure they don't leave a candy trail where pets can find it! Finally, keep a supply of healthy, pet safe goodies on hand, such as carrot sticks or low calorie dog cookies, if you feel the need to treat!

Decoration Dangers

Lighted jack-o-lanterns, spooky fog, and festive lights on strings--all these things help create that spooky, Halloween ambiance you're after. But pets, just like small children, don't understand the dangers of candles, lanterns, or electric lights. If you have pets, use small battery operated lights instead of real flame

Kitty Care ALERT!

It's sad, but true. Cats, particularly black ones, are at risk of being pet-napped or harmed during Halloween season. If you allow your cats outside, do your best to keep them indoors during the Halloween season.



Halloween Hints

to put that eerie glow in your scary pumpkin's eyes. If you're using dry ice to create a spooky mist inside your Halloween lair, keep pets, as well as small children, out of the fog since it's composed of CO2 gas. Small people and critters can suffocate. Finally, remember that anything new will be of interest to a curious pet. Keep electric cords up out of the way where pets can't reach or chew them and be electrocuted.

Stranger, Beware

Halloween can be a frightening time for some pets. The people they think they know and love dress up, put on masks, and don't look the same, while complete strangers come to the door and keep ringing the doorbell... again and again! It can all be very confusing for a pet. So, put yourself in their shoes, or, er, paws, for the day, and do what you can to minimize stress. If your pet seems nervous or worried, close him or her up in a quiet room with the door shut. Put on the TV, play some music, or leave some toys for them to play with. Don't take him or her out trick-or-treating with you. Keep in mind that some otherwise well-behaved pets may even bite if they are scared or stressed enough. A scary mask can frighten a dog as much as it can a small child, so be prepared and don't take chances.

Black cats are more at risk of being the target of harmful mischief during the Halloween season.

The Do's and Don't of Pet Dress Up

At Halloween time, lots of owners enjoy dressing up their pets in cute costumes to compliment their own get-ups. When selecting a costume, keep in mind that, while some dogs may enjoy the extra attention, most animals don't like to have any unusual clothing on their bodies and can become scared, irritated, or uncomfortable. If you do dress up your dog, start with something simple and see how they react before putting on costumes that are more complicated. A Halloween theme collar, leash, or bandana may be festive enough for these dogs! Make sure any pet clothing is properly adjusted. Too tight, and it can cut off circulation to a tail, leg, or ear or cause them to choke. Too loose, and your pet can trip on it or get it caught on something. Make sure pets can see, smell, and hear through their costumes. Never leave a pet unattended "in costume" in the event he or she becomes scared or tries to chew it off. Serious injury can occur, especially in cats with anything tied around their neck or chest. It is best to leave the costume capers simple and only attempt with consenting, outgoing canines.

